NASA GLENN RESEARCH CENTER SEED TASK 01 ADDENDUM No. 2

DATE: JUNE 3, 2014

SOLICITATION NO.: NNC14ZFD020J

PROJECT ID: COF20196

PROJECT TITLE: FY14 LEWIS FIELD STORM SEWER SYSTEM REPAIR, PHASE 1

A. GOVERNMENT CLARIFICATIONS

The following clarifications are provided by the Government to explain the scope of work for the FY14 LEWIS FIELD STORM SEWER SYSTEM REPAIR, PHASE 1 project. This is scope of work that has been changed, omitted or requires clarification.

CLARIFICATION No. 1

The pot hole locations indicated on design drawings dated 01/29/2014 were subsurface investigations performed by the Architect-Engineer to identify the elevation of utilities noted in the profile views. These pot hole locations are provided for information only. For pot hole responsibilities by Contractor see CLARIFICATION No. 1 of "Seed Task 01 Addendum No. 1" dated May 13, 2014.

CLARIFICATION No. 2

Quantities shown on design drawings dated 01/29/204 are estimated quantities only. Contractor shall verify all quantities noted on the design drawings. Government shall not be liable for incorrect quantities noted on design drawings.

CLARIFICATION No. 3

The following shall be added to subpart 1.1.2, UNIT PRICE ITEMS, of specification section 01 11 00.98, SUMMARY OF WORK, and included in the Task Pricing Schedule:

i. Unit Price Item 9: Provide a price per S.F. for relining of existing manholes greater than the standard manhole size of 48" in diameter.

CLARIFICATION No. 4

For bidding purposes, the Contractor shall assume, for relining purposes only, each manhole structure, unless noted on the plans, is a minimum 48" diameter manhole and has a flat top with no conical section.

B. CONTRACTOR QUESTIONS AND ANSWERS

The following questions were submitted by Contractors regarding the scope of work for the FY14 LEWIS FIELD STORM SEWER SYSTEM REPAIR, PHASE 1 project. The answers are provided by the Government.

QUESTION No. 1

Please provide the existing thickness of concrete drive areas.

ANSWER:

The thickness of existing concrete drive areas ranges from 6" to 10".

QUESTION No. 2

Please provide the existing thickness of concrete sidewalks areas.

ANSWER:

Assume the thickness of existing concrete sidewalk areas to be 5".

Please provide the existing thickness of asphalt concrete drive areas, roadways. ANSWER:

The thickness of asphalt is variable throughout areas – roadways vary between 12" and 15", parking lots vary between 8" and 12". There are also areas with a slag base of varying depth.

QUESTION No. 4

For purposes of CIPP lining and construction of new, is the contractor going to be able to disable, plug storm drains upstream to prevent flow down of storm water?

ANSWER:

Yes, storm drainage bypassing will be required. See specification section 01 11 00.98, SUMMARY OF WORK, subpart 3.3.3, Diverting Stormwater Flow, for additional information.

QUESTION No. 5

Can the contractor assume that no more than 10% of existing pipes are full of debris on average for the purposes of vacuuming the existing pipes prior to CIPP lining and if greater than 10% is encountered it would be considered an unforeseen condition?

ANSWER:

See QUESTION Nos. 20 and 31 of Seed Task 01 Addendum No. 1 dated May 13, 2014.

QUESTION No. 6

Outfall 6, Alignment 06-B-S, PSMH 06-3950, is a manhole that connects to an existing 60" storm pipe to be relined. The connection is approximately 40 feet below existing grade. There are no details for this specific condition. Shoring, boring and footing or foundation details that would be typical for this area for a fully designed project. Significant engineering must be provided for the installer. Please provide any historical borings or soils report in this area or information regarding ground water. Please advise.

ANSWER:

Contractor is required to submit shoring plans and provide dewatering as necessary. See, as applicable, specification sections 31 23 01.98, EXCAVATING, BACKFILLING, AND COMPACTING FOR STRUCTURES, and 31 23 02.98, EXCAVATION, BACKFILLING, AND COMPACTING FOR UTILITIES, for additional information. Ground water is dependent on season work. Typical range is no water or groundwater evident at 10 ft. depending on season.

ATTACHMENT 1, provided for reference only, to this Addendum includes information from a boring, the closest to PSMH 06-3950, taken at the corner of Buildings 39 and 53.

QUESTION No. 7

Outfall 8 from Alignment 08-A-S provides significant logistical challenges for the CIPP relining. Very costly options for the contractor include a very large crane, helicopter work, fabricating and installing a platform on the existing gantry rail that allows the adjacent building to move/slide and the engineering for that. Would the Government consider revising the scope in this area, particularly from the existing manhole SMH 08-1100 to the terminus of outfall 8, to applying a coating instead of CIPP. May we suggest, centrically spun cast concrete coating, or HDPE liner. There would be significant cost savings for such a short end piece.

ANSWER:

For this section of work between SMH 08-1100 and the terminus of Outfall No. 8 a spray-in-place liner may be considered as long as it is a Class IV structural liner.

Who will be responsible for dewatering the basins in Outfall 1 for construction and will there be a temporary plug installed to prevent storm water intrusion during construction in this area? ANSWER:

The West Industrial Waste Basin will be dewatered by the Government. See specification section 01 11 00.98, SUMMARY OF WORK, subpart 3.3.8, West Industrial Waste Basin. Once Basin is dewatered by Government, Contractor will be responsible to remove surface water generated by rainfall or snowmelt.

QUESTION No. 9

Who will be responsible for cleaning the debris, algae, etc. from the west basin for joint replacement?

ANSWER:

The West Industrial Waste Basin will be cleaned by the Government. See specification section 01 11 00.98, SUMMARY OF WORK, subpart 3.3.8, West Industrial Waste Basin, for additional information.

QUESTION No. 10

Is the contractor to provide,

- a. Shoring adjacent to the existing satellite dishes at Outfall 1 Alignment 01-A-S and if so,
- b. Is it to be engineered and sealed by a local engineer and if so,
- c. Can you provide as-build designs for the foundations of the satellite dishes?
 ANSWER:
 - a. Yes, per Construction Requirement 3 on design drawing G-013 dated 01/29/2014, Contractor to protect (shore / support) any existing object that is not to be removed as a part of this plan. This shall include all structures, including satellite dishes, and appurtenances.
 - b. Yes, per Construction Requirement 8 on design drawing G-013 dated 01/29/2014, shoring plans to be Engineer-sealed. See, as applicable, specification sections 31 23 01.98, EXCAVATING, BACKFILLING, AND COMPACTING FOR STRUCTURES, and 31 23 02.98, EXCAVATION, BACKFILLING, AND COMPACTING FOR UTILITIES.
 - c. Foundation designs for the satellite dishes are not available.

QUESTION No. 11

Inlet protection on C-514 appears to be for locations that will be excavated or disturbed. Is there required inlet protection of existing curb or drop inlets that will remain, but connected to any of the systems we are working on?

ANSWER:

Yes, inlet protection required for all existing inlets as shown on design drawings G-016, G-017, and G-019, dated 01/29/2014, as well as all erosion control plan notes. Inlet protection also required for any other existing inlet found in the field.

QUESTION No. 12

Sheet C-117, please clarify the purpose of the potholes.

ANSWER:

The pot hole locations indicated on design drawing C-117 were subsurface investigations performed by the Architect-Engineer to identify the elevation of utilities noted in the profile view. These pot hole locations are provided for information only. For pot hole responsibilities by Contractor see CLARIFICATION No. 1 of "Seed Task 01 Addendum No. 1" dated May 13, 2014.

Sheet C-117, section drawing, Station 63+50, please clarify, 6" S (Contractor field verify size) (Cut). What is this, what are we to do with it, for what length?

ANSWER:

After the lining procedure is completed on the main, the existing 6" storm lateral opening shall be cut/opened to tie into the main.

QUESTION No. 14

Sheet C-141 Gridlines D/6-7 shows both (10) 24" pipe and (18) 27" pipe. Please clarify. ANSWER:

Delete Coded Note 18 from design drawing C-141. The pipe is 24". As noted, refer to alignment 6-B-S on C-150.

QUESTION No. 15

C-149 Proposed Sampling Station. After speaking with Teledyne they do not have a part number 1500 as referenced on Note 4. They do however have the 3700C and the booster pump SPA1861 / 605314861. The system requires a battery and solar charger that appears to be not included in the RFP.

ANSWER:

Delete "1500" from Note 4. Contractor to provide and install Teledyne Isco 3700C compact portable sampler and booster pump, part number 60-5314-861 (SPA 1861). Contractor shall provide a battery power source with the sampling station. Solar panel battery charger option is not required. Contractor shall provide manufacturer's Operation & Maintenance data for sampling station and all appurtenances. At the completion of the installation the Contractor shall conduct a maximum eight hour training course for meter configuration, operation, and maintenance of the system. The training shall include, at a minimum: Physical layout of each piece of hardware; Meter configuration, troubleshooting and diagnostics procedures; Repair instructions; Preventive maintenance procedures and schedules; Testing and calibration procedures.

QUESTION No. 16

C-150 gridline C5 shows note 18, but there is not an 18 on the legend. Elsewhere note 18 represents new 27" pipe, this appears to be CIPP relining 18" pipe. Please advise. ANSWER:

Delete Coded Note 18 from design drawing C-150.

QUESTION No. 17

C-151 gridline C3 shows note 20 & 5 denoting existing manhole replace stairs and cover, but in the vertical alignment is shows a new structure, please advise.

ANSWER:

Delete Coded Notes 5 and 20 from design drawing C-151. Install the manhole as depicted in the profile view.

QUESTION No. 18

C-153 Gridline E6 shows note 5, 13 and 20 but the vertical alignment shows this to be a new structure, and there is no note 5 or 20 on this sheet. Note 13 suggest SIPP relining existing Please advise.

ANSWER:

Delete Coded Notes 5, 13, and 20 from design drawing C-153. Install the manhole as depicted in the profile view.

QUESTION No. 19

C-167 gridline C3 shows note (13) SIPP existing manhole relining, yet is also shows note 14 and 20 that denotes existing catch basin to be replaced. Please advise.

ANSWER:

Delete Coded Note 14 from design drawing C-167.

Would Barr & Provost be in conflict to perform testing and surveying and if needed engineering for shoring?

ANSWER:

Contractor may solicit testing, surveying, and shoring engineering services from any qualified engineering/design firm. See specifications for information regarding engineer/designer qualifications.

QUESTION No. 21

Can NASA perhaps have Barr & Provost perform engineering design for shoring at all required locations?

ANSWER:

Per Construction Requirement 8 on design drawing G-013 dated 01/29/2014, Contractor to provide Engineer-sealed shoring plans. See, as applicable, specification sections 31 23 01.98, EXCAVATING, BACKFILLING, AND COMPACTING FOR STRUCTURES, and 31 23 02.98, EXCAVATION, BACKFILLING, AND COMPACTING FOR UTILITIES, for additional information regarding shoring plan requirements.

QUESTION No. 22

Sheet C-717 there is a hash striping in a dark line weight that appears along Walcott Rd. Is this to be restriped?

ANSWER:

The ramp to the northeast of West Area Road depicts the limits of the crosswalk. The solid line to the northeast of this ramp shall be omitted but cross-hatching shall remain.

QUESTION No. 23

Sheet C-185, coded note 3, is it the intention to remove and replace the entire length of sidewalk along West Road, or just sections. It is not clear the extent of the sidewalk remove and replace. ANSWER:

It is the intent to replace the entire length of sidewalk. See design drawings C-197 and C-198, West Area Road Plans & Profiles, and design drawings C-301 through C-314, West Area Road Cross Sections. Quantity identified by Coded Note 3 on design drawing C-185 dated 01/29/204 is an estimated quantity. Contractor shall verify all quantities noted on the design drawings. See CLARIFICATION No. 2 of this Addendum.

QUESTION No. 24

Should the offeror provide a bid bond for the Plum Brook Station and a bid bond for Lewis Field Storm Sewer?

ANSWER:

Yes, a bid bond is required for each individual Seed Task.

QUESTION No. 25

C-715, a significant portion of the pavement markings appear on the West Road Option. Please clarify where you want pricing for this work.

ANSWER:

West Area Road pavement markings outlined on design drawing C-715 shall be included in pricing for Bid Option No. 2.

QUESTION No. 26

Would #304 limestone be considered as an acceptable substitute in-lieu of LSM for premium backfill material of utilities within limits of pavement?

ANSWER:

No. #304 limestone will not be considered an acceptable substitute for LSM.

What are the testing requirements for RCP? Reference spec. section 33 40 00.98. ANSWER:

Part A of specification section 33 40 00.98, STORM DRAINAGE UTILITIES, part 3.7, Pipeline Testing, does not apply to RCP.

QUESTION No. 28

Sections of the pipe relining/CIPP work may require non-stop operations in order to complete the lining & curing process. Will the restricted work hours be adjusted to account for the need to potentially have CIPP crews onsite 24/7?

ANSWER:

Yes, work hours can be adjusted. Requests for additional work or extended work hours shall be coordinated with the NASA Project Manager and NASA Construction Manager. Work, requested by the Contractor, to be performed outside the normal duty hours shall not entitle the Contractor to additional payment. See specification section 01 11 00.98, SUMMARY OF WORK, part 1.4, Work Rescheduling, for additional information.

QUESTION No. 29

It was mentioned at the site showing that (with request) engineer quantities would be provided to bidders. Would you please share these quantities to bidders for reference. ANSWER:

Engineer quantities will not be provided to bidders. Contractor shall use Government-provided design drawings to develop own estimate. See CLARIFICATION No. 2 of this Addendum.

QUESTION No. 30

At the site showing, NASA personnel was not able to open each manhole for bidder inspection. In review of the bid documents, no dimensions are provided for each of the manholes requiring rehabilitation. Would NASA please confirm the inside diameter (id) of these structures? Specifically, what and what quantity are the id of structures greater than 48" id? ANSWER:

See CLARIFICATION No. 3 and CLARIFICATION No. 4 of this Addendum.

QUESTION No. 31

Can any of the bid options be awarded stand-alone or separately of the base bid items? ANSWER:

The Base Task Contract award will include the project's base bid scope of work. Option work will be awarded at the discretion of the Government.

QUESTION No. 32

Is manhole #08-1100 to be relined? Please provide details of this elevated (tower) structure. Is it NASA's intent to lower the rim elevation of this structure to existing grade for access? Reference plan sheet C-173.

ANSWER:

Per Coded Note 13 on design drawing C-174 dated 01/29/2014, storm manhole SMH 08-1100 is to be relined. No, NASA does not intend to lower the rim elevation of this structure.

ATTACHMENT 2, provided for reference only, to this Addendum reflects the existing structure details.

QUESTION No. 33

Sheet C-146, vertical alignment station 111+60 shows a proposed 36" S pipe, plan view shows a note (18) proposed 27" pipe. Please clarify.

ANSWER:

The proposed pipe is 27".

C-146 note 3, construct per ODOT MH 2.1. This installation method is designed for new systems and would be installed in line, in sequence. I believe there needs to be some modification details to allow this installation retrofit. Please advise.

ANSWER:

The reference is for a Manhole No. 4, described by DETAIL STRM-MH-4 on design drawing C-524 dated 01/29/2014.

QUESTION No. 35

There are several sections that pipe would backfill 10-25 feet from invert of pipe to finish grade. Note 1 says to backfill with low strength mortar. I just want to confirm that even in areas with 20 feet or more of backfill we need to backfill to finish grade with low strength mortar. ANSWER:

Yes, for areas under or within six feet of pavement.

QUESTION No. 36

Is there an on site disposal site for excavated spoils or should the contractor pay for export and disposal?

ANSWER:

See "Commercial/Industrial Fill Soil" and "Solid Waste Soil" notes on design drawing G-011 dated 01/29/2014 for information regarding excavated spoils.

QUESTION No. 37

C-191, new 12" pipe from station +50 to 1+80, can we excavate using a horizontal bore and perhaps use plastic or steel pipe, or possibly use an oversized pipe for a sleeve.

ANSWER:

Contractor shall be responsible for means and methods of installation subject to Government approval.

QUESTION No. 38

Is there any expectation to have pavement markings replaced in the patch back areas? ANSWER:

Pavement markings shall be replaced in-kind. Pavement markings on Walcott, Moffett, and Westover Roads shall be replaced with thermoplastic markings.

QUESTION No. 39

What surveying is the contractor responsible for, construction layout, as build? ANSWER:

Contractor shall be responsible for construction layout and as-built survey services as noted on design drawing G-010 dated 01/29/2014.

QUESTION No. 40

Please confirm, the sampling station in Outfall 8. C-166, station 200+80, appears to have no sampling equipment (Teledyne).

ANSWER:

The existing sampling station located at Outfall 8 is owned by the City of Cleveland. Contractor shall protect, or remove and reinstall if necessary, sampling station during construction.